

ABSTRACT

A method of curing radiation-curable fluid is described. In one example, the method includes emitting radiation from an array of light-emitting diodes towards ink to be cured. LEDs are cheap, light weight, highly efficient in their conversion of electrical power, and give effectively instant switching to full power. Another advantage is that the emission spectrum of an LED is sharply peaked around the nominal frequency. Thus LEDs give several advantages over conventional radiation sources such as mercury lamps. A low oxygen environment is preferably provided at the radiation source to accelerate the curing reaction. Also described are inks which are specially formulated to respond to the radiation emission spectrum of an LED.

DC2DOCS1\658724